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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,494	01/29/2002	Yu-Hsuan Tsai	67,200-663	6938

7590 06/11/2003

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Bloomfield Hills, MI 48302

EXAMINER

COLEMAN, WILLIAM D

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 06/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,494

Applicant(s)

TSAI, YU-HSUAN

Examiner

W. David Coleman

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed April 21, 2003 have been fully considered but they are not persuasive.

Applicants contend that Bonora et al., U.S. Patent 5,570,990 herein known as Bonora fails to teach that LED(s) disclosed are for any information conveyance directly to a human operator nor does it suggest any such use or adaption.

In response to Applicants argument that Bonora fails to teach that LED(s) disclosed are for any information conveyance directly to a human operator nor does it suggest any such use or adaption, Applicants arguments are moot. Bonora teaches a human interface with an apparatus for visually conveying information (column 9, lines 2-11). Bonora teaches an apparatus having a display which could be an LED, LCD or other known in the art. A keyboard (which requires human interaction) is used to allow the operator to enter commands.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonora et al., U.S. Patent 5,570,990.

Bonora discloses a semiconductor apparatus as claimed. See **FIGS. 1A-18** where Bonora teaches an apparatus for visually conveying information to a human operator in a manufacturing process comprising:

a container **18** for transporting work in progress used in the manufacturing process;
an electronic data card **232-1** that follows the container through at least a portion of the manufacturing process, said electronic data card including a microcomputer (column 8, lines 30-46) and containing data related to one or more of the manufacturing process and related equipment; and, at least one light emitter (not shown, column 8, line 44) associated with the electronic data card and operable in response to a set of instructions executed by said microcomputer to visually convey predetermined information directly to a human operator about one or more of the manufacturing process and related equipment.

3. Pertaining to claim 2, Bonora teaches the apparatus as claimed in claim 1 wherein said data is related to a predetermined time to clean said container.
4. Pertaining to claim 3, Bonora teaches the apparatus as claimed in claim 1 wherein said data is related to priority of the work in progress associated with said container.
5. Pertaining to claim 4, Bonora teaches the apparatus as claimed in claim 1 wherein the data card further includes a battery and said data is related to battery life (column 7, lines 37-45).
6. Pertaining to claim 5, Bonora teaches the apparatus as claimed in claim 1 wherein said light emitter is a light emitting diode (column 8, line 44).
7. Pertaining to claim 6, Bonora teaches the apparatus as claimed in claim 1 wherein said work in progress comprises microchip wafers (column 2, lines 1-10).

8. Pertaining to claim 7, Bonora teaches an electronic data card for storing predetermined manufacturing process and related equipment information, said electronic data card including a microcomputer, an alphanumeric display and operator interface buttons for operator retrieval of stored manufacturing process and related equipment information, the improvement comprising: at least one light emitting diode conditionally illuminated in accordance with a set of instructions executed by the microcomputer to perform at least one conditional check upon at least one of said stored manufacturing process and related equipment information, wherein the result of said at least one conditional check is visually conveyed for viewing by a human operator by the illumination condition of said at least one light emitting diode (column 9, lines 2-11).

9. Pertaining to claim 8, Bonora teaches the electronic data card as claimed in claim 7 wherein said manufacturing process and related equipment information comprises a preventive maintenance variable (column 4, lines 51-64).

10. Pertaining to claim 9, Bonora teaches the electronic data card as claimed in claim 7 wherein said manufacturing process and related equipment information comprises a process priority variable (i.e. "reduces the probability of a clean room operator placing the wrong SMIF pod on the wrong SMIF port (column 3, lines 25-27).

11. Pertaining to claim 10, Bonora teaches the electronic data card as claimed in claim 7 further comprising a battery, wherein said manufacturing process and related equipment information comprises a battery life variable.

12. Pertaining to claim 11, Bonora teaches a method of visually conveying critical information associated with a production lot of work in progress wafers in a microchip fabrication process comprising the steps: providing an electronic data card capable of storing

Art Unit: 2823

information, executing a set of instructions, and having at least one controllably illuminated LED; associating said electronic data card with said production lot throughout at least a portion of the fabrication process; storing predetermined information corresponding to the production lot on said data card; providing the electronic data card with a set of executable instructions for performing conditional checks on said predetermined information; and, controlling the illumination of said at least one LED in a predetermined manner in accordance with results of said conditional checks on said predetermined information, whereby the manner in which the LED is illuminated visually conveys critical information associated with said production lot related to said predetermined information.

13. Pertaining to claim 12, Bonora teaches the method as claimed in claim 11 wherein multiple LED are controllably illuminated to convey critical information related to a single piece of information directly to a human operator.

14. Pertaining to claim 13, Bonora teaches the method as claimed in claim 11 wherein multiple LED are controllably illuminated to convey critical information related to multiple pieces of information.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2823

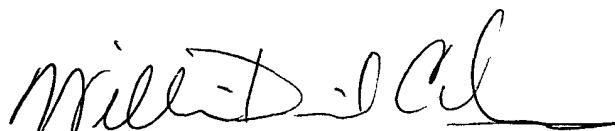
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. David Coleman whose telephone number is 703-305-0004.

The examiner can normally be reached on 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A handwritten signature in black ink, appearing to read 'W. David Coleman', with a long horizontal flourish extending to the right.

W. David Coleman
Primary Examiner
Art Unit 2823

WDC
June 6, 2003